	Catatan Hasil Kalibrasi Internal	No. : F-PM-01-26
	<i>Internal Calibration Record</i>	Rev. : 00
	Gelas Ukur / Measuring Cylinder	Berlaku : 03 September 2014

Merak :	Bidang/Lokasi :
<i>Brand</i>	<i>Department/Location</i>
Type/Kelas :	Suhu ruang :
<i>Type/Class</i>	<i>Room temperature</i>
No. Seri :	Kelembaban :
<i>Serial no.</i>	<i>Humidity</i>
Kode kalibrasi :	No. Protap :
<i>Calibration code</i>	<i>SOP No.</i>
Kapasitas / Resolusi : ml / ml	Petugas :
<i>Capacity / Resolution</i>	<i>Operator</i>
Syarat (kelas A) : ml	Tanggal kalibrasi :
<i>Requirement (Class A)</i>	<i>Calibration date</i>

Kalibrator yang digunakan <i>Calibrator used</i>	Kode Kalibrasi <i>Calibration Code</i>	Tanggal kalibrasi Kalibrator <i>Cal. date of Calibrator</i>
1. Neraca Analitik 2. Termometer		

Catatan/Note :

$T_{Air} = 24.0 \text{ } ^\circ\text{C}$	$\rho_{Air} = 0.99729 \text{ g/ml}$	$\rho_{Air 20^\circ\text{C}} = 998.202 \text{ kg/m}^3$	$\rho_{AT} = 8 \text{ g/ml}$
$\rho_{Udara} = 0.0012 \text{ g/ml}$	$\gamma_{borosilikat} = 1.E-05 \text{ } /^\circ\text{C}$	$\gamma_{soda lime} = 2.5.E-05 \text{ } /^\circ\text{C}$	$LOP_{Neraca} = 0.0026 \text{ gram}$
$U_{Sert Termometer} = 0.7 \text{ } ^\circ\text{C}$		$\Delta\rho/\Delta T = -0,00026 \text{ g/ml}^\circ\text{C}$	$\Delta \text{ Suhu} = 24.0 \text{ } ^\circ\text{C}$

A. Data

1. $V_{nominal} =$ ml

Ulangan <i>Rep.</i>	W_{kosong} W_{Empty} (g)	$W_{Isi(air)}$ W_{Water} (g)	ΔR ΔR (g)
ΔR rata-rata/average		g	
SD (σ_{n-1})		g	
Isi / Volume, $V_{T20 \text{ } ^\circ\text{C}}$		ml	

2. $V_{nominal} =$ ml


Ulangan <i>Rep.</i>	W_{kosong} W_{Empty} (g)	$W_{Isi(air)}$ W_{Water} (g)	ΔR ΔR (g)
ΔR rata-rata/average		g	
SD (σ_{n-1})		g	
Isi / Volume, $V_{T20 \text{ } ^\circ\text{C}}$		ml	

3. $V_{nominal} =$ ml

Ulangan <i>Rep.</i>	W_{kosong} W_{Empty} (g)	$W_{Isi(air)}$ W_{Water} (g)	ΔR ΔR (g)
ΔR rata-rata/average		g	
SD (σ_{n-1})		g	
Isi / Volume, $V_{T20 \text{ } ^\circ\text{C}}$		ml	

4. $V_{nominal} =$ ml

Ulangan <i>Rep.</i>	W_{kosong} W_{Empty} (g)	$W_{Isi(air)}$ W_{Water} (g)	ΔR ΔR (g)
ΔR rata-rata/average		g	
SD (σ_{n-1})		g	
Isi / Volume, $V_{T20 \text{ } ^\circ\text{C}}$		ml	

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5 $V_{nominal} =$ ml

Ulangan Rep.	W_{kosong} W_{Empty} (g)	$W_{isi(air)}$ W_{Water} (g)	ΔR ΔR (g)
ΔR rata-rata/average		g	
SD (σ_{n-1})		g	
Isi / Volume, $V_{T20}^{\circ C}$		ml	

B. Perhitungan

Calculation

1. Perhitungan ketidakpastian volume nominal = ml


Uncertainty calculation of nominal volume

No. No.	Sumber Ketidakpastian Source of Uncertainty	Satuan Unit	Distribusi Distribution	Nilai U_i U_i value	Pembagi Divisor	u_i	Coeff. C_i		$u_i C_i$ $u_i C_i$	V V
							Coeff.	C_i		
Ketidakpastian baku gabungan / Combined Uncertainty, $u(D) = \text{SQRT}(\sum (u_i C_i)^2)$										
Derajat kebebasan efektif / Effective degree of freedom, V_{eff}										
Faktor cakupan pada tingkat kepercayaan 95% / Coverage Factor on uncertainty 95%, $K_{95\%}$										
Ketidakpastian gabungan perluasan / Expanded Uncertainty, $U(D) = u(D) \times K_{95\%}$, dalam l in ml										

2. Perhitungan ketidakpastian volume nominal = ml

Uncertainty calculation of nominal volume

No. No.	Sumber Ketidakpastian Source of Uncertainty	Satuan Unit	Distribusi Distribution	Nilai U_i U_i value	Pembagi Divisor	u_i	Coeff. C_i		$u_i C_i$ $u_i C_i$	V V
							Coeff.	C_i		
Ketidakpastian baku gabungan / Combined Uncertainty, $u(D) = \text{SQRT}(\sum (u_i C_i)^2)$										
Derajat kebebasan efektif / Effective degree of freedom, V_{eff}										
Faktor cakupan pada tingkat kepercayaan 95% / Coverage Factor on uncertainty 95%, $K_{95\%}$										
Ketidakpastian gabungan perluasan / Expanded Uncertainty, $U(D) = u(D) \times K_{95\%}$, dalam l in ml										

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3. Perhitungan ketidakpastian volume nominal = ml

Uncertainty calculation of nominal volume

No	Sumber Ketidakpastian <i>Source of Uncertainty</i>	Satuan <i>Unit</i>	Distribusi <i>Distribution</i>	Nilai U_i <i>U_i value</i>	Pembagi <i>Divisor</i>	u_i	Coeff. C_i		$u_i C_i$ <i>u_i C_i</i>	V
							Coeff.	C_i		
Ketidakpastian baku gabungan / <i>Combined Uncertainty</i> , $u(D) = \text{SQRT}(\sum (u_i C_i)^2)$										
Derajat kebebasan efektif / <i>Effective degree of freedom</i> , V_{eff}										
Faktor cakupan pada tingkat kepercayaan 95 % / <i>Coverage Factor on uncertainty 95%</i> , $K_{95\%}$										
Ketidakpastian gabungan perluasan / <i>Expanded Uncertainty</i> , $U(D) = u(D) \times K_{95\%}$, dalam / in ml										

4. Perhitungan ketidakpastian volume nominal = ml

Uncertainty calculation of nominal volume

No	Sumber Ketidakpastian <i>Source of Uncertainty</i>	Satuan <i>Unit</i>	Distribusi <i>Distribution</i>	Nilai U_i <i>U_i value</i>	Pembagi <i>Divisor</i>	u_i	Coeff. C_i		$u_i C_i$ <i>u_i C_i</i>	V
							Coeff.	C_i		
Ketidakpastian baku gabungan / <i>Combined Uncertainty</i> , $u(D) = \text{SQRT}(\sum (u_i C_i)^2)$										
Derajat kebebasan efektif / <i>Effective degree of freedom</i> , V_{eff}										
Faktor cakupan pada tingkat kepercayaan 95 % / <i>Coverage Factor on uncertainty 95%</i> , $K_{95\%}$										
Ketidakpastian gabungan perluasan / <i>Expanded Uncertainty</i> , $U(D) = u(D) \times K_{95\%}$, dalam / in ml										

